



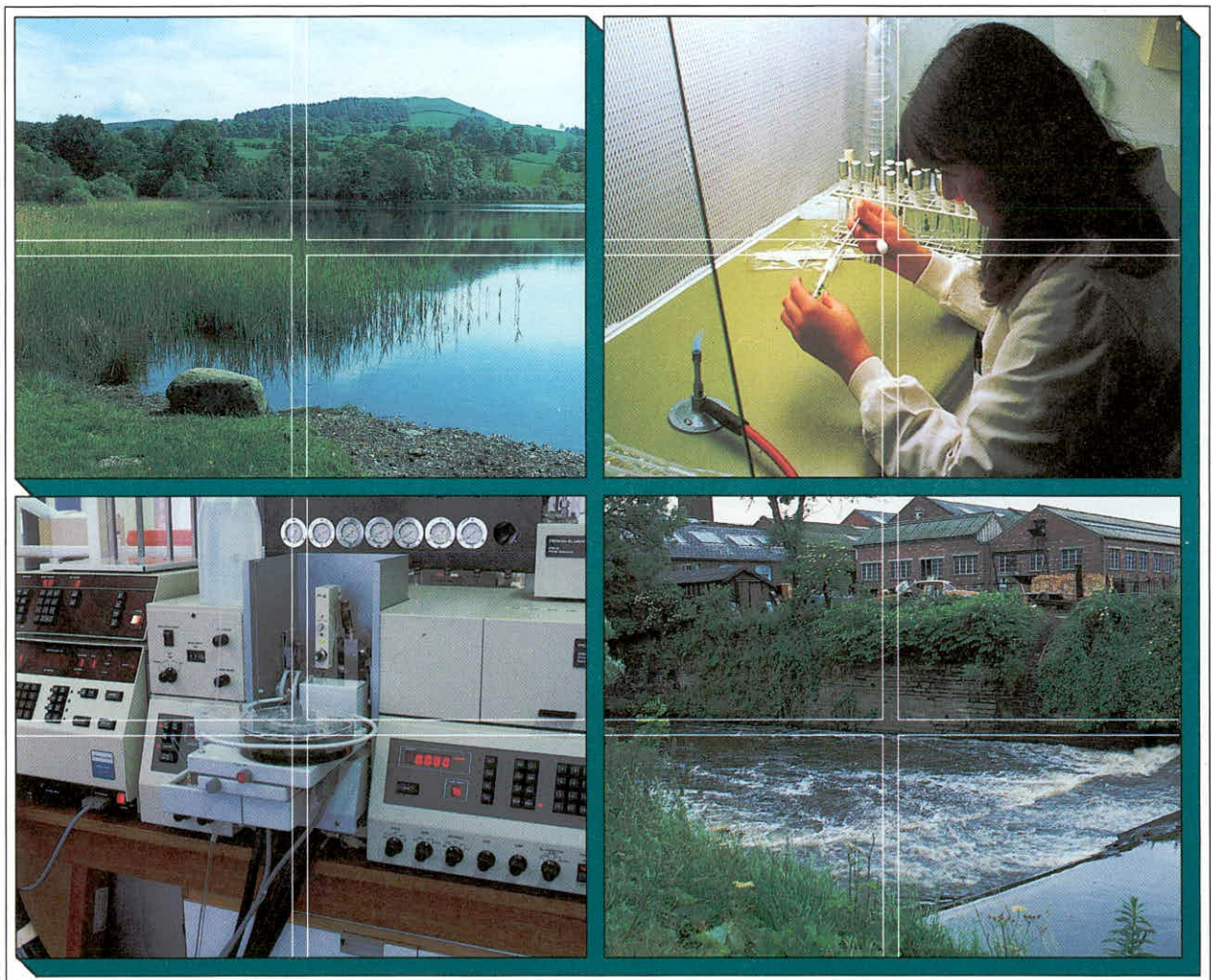
An audit of performance in the processing of macro-invertebrate samples in 1992. NRA Severn-Trent Region

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**An audit of performance in the processing
of macro-invertebrate samples in 1992.**
NRA Severn-Trent Region

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1. INTRODUCTION

In 1992 the sampling of aquatic macro-invertebrates for the biological assessment of river quality continued throughout the United Kingdom. This task was undertaken by the National Rivers Authority (NRA) in England and Wales, the River Purification Boards (RPBs) in Scotland and the Industrial Research & Technology Unit (IRTU) in Northern Ireland.

In view of the number of staff involved and the variability of sample processing techniques, it was recognised that an independent quality control exercise was necessary to promote a consistently high level of reliability. The IFE was contracted to undertake an audit of the sample sorting and identification performance of each NRA region, several RPBs and the IRTU. This report presents the results of 62 samples audited for Severn-Trent Region of the NRA. The IFE was not required to perform any statistical analyses nor interpretation of the results of the audit.

Each organisation employed standard collection procedures, as used in the 1990 River Quality Survey, and the sampling strategy was therefore compatible with RIVPACS (River InVertebrate Prediction And Classification System), which has been developed by the Institute of Freshwater Ecology (IFE).

Samples were sorted by NRA, RPB and IRTU personnel for the families of macro-invertebrates included in the Biological Monitoring Working Party (BMWP) system. Taxa present were recorded on site data sheets. Sample processing and recording techniques varied from region to region.

2. SAMPLE SELECTION

Samples for audit were selected internally by each of the agencies being monitored. The biologists processing these samples had no prior knowledge of the samples to be audited.

The manner of sample selection, which biologists would be monitored and the number of audit samples from each season, were left to the discretion of the agency, within the limits of the total number of samples that IFE was contracted to audit.

3. SAMPLE PROCESSING

The normal protocol for NRA, RPB and IRTU biologists was to sort their samples within the laboratory and to select examples of each scoring taxon within the BMWP system. In most cases, the invertebrates were placed in a vial of preservative (4% formaldehyde solution or 70% industrial alcohol) and the BMWP taxa were listed on a data sheet. The vial of animals and the sorted material were then returned to the sample container and preservative added. Thus, each sample available to IFE for audit should have included:

- i) a list of the BMWP families found in the sample
- ii) a vial containing representatives from each family
- iii) the preserved sample

When these three elements were present, the sequence of operations at IFE was as follows:

- a) The remainder of the sample was sorted and the BMWP families listed
- b) The families contained within the vial were identified and listed
- c) A comparison was made between the NRA listing of families and those identified from the vial by IFE
- d) A comparison was made between the NRA listing of families and those found in the sample by IFE
- e) "Losses" or "gains" from the NRA listing of families were noted. In the case of "gains", each additional family was identified, where possible, to species level, in order to clarify any specific repetitive errors.

For a number of different reasons, some samples did not include a vial containing representative examples of the families listed on the data sheet. Others arrived with the vial damaged in transit such that the representative examples were no longer separated. For these samples, only operations a), d) and e) above were appropriate.

Several directives were issued to IFE relating to the treatment of BMWP taxa. Terrestrial representatives of BMWP scoring families, animals deemed to have been dead at the time of sampling, cast insect skins, pupal exuviae, empty mollusc shells and posterior ends of "living" specimens were to be excluded from the listing of families present. Chrysomelidae and Curculionidae, which appear in the BMWP list, were also to be excluded for the purposes of the audit. Trichopteran pupae, although not routinely identified by many biologists, were to be included in the listing of families.

4. REPORTING

The results of each sample audit were recorded on a standard report form (Table 1). For audit samples where a vial of animals was included, the comparison between the NRA listing and the taxa found in the vial by IFE was shown in box A of the report form. Discrepancies could be due to carelessness, misidentifications or errors in completing the NRA data sheet. Families not on the NRA listing but found by IFE in the remainder of the sample were entered in box B of the report form under "additional families". When the families listed as "losses" in section A of the report form were compared with the full list of families recorded in the sample by IFE, some apparent losses from the vial were offset by the presence of those families in the remainder of the sample. These taxa were therefore listed in the "losses" box of section A and the "gains" box of section B and were neither a net loss nor a net gain. In these cases, the families were marked with an asterisk in both boxes. Such errors are noted as "omissions" in the tables which summarise the results for each season (Tables 2, 3 and 4).

Species identifications, state of development (eg adult or larval coleopterans) and the presence of a single representative of a family within the remainder of the sample were recorded in the notes section of the report form. Where the NRA data sheet indicated that a family was noted and released at the site, this was recorded in the notes section but not included as a "loss", even though the family was not found in the vial.

For those samples in which the vial of animals was damaged or missing, box A of the report form was not applicable (N/a). Families not on the NRA list but present in the sample were listed in box B under "additional families" as before. Families recorded on the NRA list but not found by IFE were indicated on the left hand side of box B. If the vial of animals was retained by the NRA, entries in this box could include the sole representative of a family which was removed by the NRA, a family seen at the site which escaped or was released (without mention being made on the NRA data sheet), inaccurate identification, the wrong family box being ticked on the NRA data sheet or the family being present in the sample but missed by IFE.

Results of the audits of individual samples are presented in the Appendix.

ACKNOWLEDGEMENTS

Thanks to Kay Symes for help with production of results and to Valerie Palmer for typing the manuscript.

TABLE 1. The IFE Report form

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	<input type="text"/>	RIVER	<input type="text"/>
DATE	<input type="text"/>	SITE	<input type="text"/>
SORTER	<input type="text"/>	SAMPLE CODE	<input type="text"/>

AQC OF BMWP FAMILIES A. IN VIAL ☐ B. IN SAMPLE ☐

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE		

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	

NOTES: NET LOSSES ☐ NET GAINS ☐

TABLE 2. The 20 spring samples audited for Severn-Trent Region.

River	Site	Sorter	Losses	Gains	Omissions
Nailsworth Stream	Avening	2.4	0	1	0
Glynch Brook	Bury Court	2.4	0	0	1
Piddle Brook	d/s Flyford Flavell WRW	2.3	0	1	0
Smite Brook	u/s Coombe Abbey WRW	2.3	0	0	0
Lathkill	Alport	4.1	0	1	1
Cole	Lowbrook Bridge	3.5	0	2	0
Kyre Brook	Tenbury	1.3	0	3	0
Polser Brook	Radcliffe-on-Trent	4.3	0	3	0
Wye	Ashford	4.1	0	1	0
Rothley Brook	Newton Unthank	4.2	0	3	1
Sibson Brook	Sibson	3.1	0	5	0
Corve	Beambridge	1.3	1	3	0
Henmore Brook	u/s Ashbourne	3.1	0	1	1
Saltersford Brook	Oakthorpe	3.5	0	1	0
Oldcoates Dyke	Blythe	4.3	0	1	0
Severn	Montford Bridge	1.1	2	2	0
Ragdale (Hoby) Brook	u/s R. Wreake	4.2	1	1	0
Collingham Brook	Collingham	4.2	0	2	0
Torne	Hirst Priory	4.1	1	1	0
Teme	Burrington	1.1	0	4	0

TABLE 3. The 20 summer samples audited for Severn-Trent Region

River	Site	Sorter	Losses	Gains	Omissions
Torne	Tunnel Pits Farm	4.3	0	2	0
Ryton	Harrycrofts	4.1	0	3	0
Onny	Newington Footbridge	1.1	0	3	0
Rea Brook	Malehurst	1.1	0	1	1
Press Brook	u/s Clay Cross WRW	4.3	0	0	0
Foston Brook	Scropton	3.5	0	3	0
Anker	Tamworth	3.7	0	2	1
Dove	Sprink	3.7	0	1	0
Frome	Edgeworth Mill	2.4	0	3	0
Itchen	u/s Long Itchington WRW	2.4	1	2	0
Tern	Betton	1.1	0	3	0
Dove	Dovedale	3.7	0	2	0
Oldberrow Brook	B4480 Bridge	2.4	1	1	0
Scalford Brook	u/s R. Wreake	4.2	0	2	0
Quinny Brook	u/s Church Stretton WRW	1.1	0	1	0
Plants Brook	Pype Hayes	3.1	0	1	0
Meer Brook	Frith Bottom Farm	3.1	0	0	0
Leek Brook	Leekbrook	3.1	0	0	1
Derwent	Cromford Station	4.1	0	5	0
Sher Brook	Shugborough	3.7	0	4	0

TABLE 4. The 22 autumn samples audited for Severn-Trent Region

River	Site	Sorter	Losses	Gains	Omissions
Derwent	Cromford Station	4.3	0	7	0
Redlake	Jay	1.3	0	7	1
Daddle Brook	d/s Alveley WRW	1.3	0	2	0
Gaddesby (Ouston) Brook	u/s Gaddesby (Marefield) Brook	4.2	0	3	0
Hilton Brook	Longford Mill	3.1	1	2	0
Ashop	u/s Ladybower Reservoir	4.1	0	0	0
Trent	d/s Knypersley Reservoir	3.1	0	6	0
Downs Bank Brook	Oulton	3.1	0	2	1
Whitsun Brook	Bishampton	2.4	0	1	0
Birches Dingle	d/s Parkend	2.4	0	0	0
Swift	Walcote	2.4	0	1	0
Elmley Castle Brook	Crothorne	2.4	0	0	1
Dene	Fosse Way Road	2.4	0	5	0
Smite Brook	B4029 Bridge	2.4	0	2	0
Poulter	Crookford	4.3	0	0	0
Afon Gam	Fridd Fawr Fisheries	1.6	1	4	0
Banwy	Llangadfan	1.6	1	1	1
North Beck	Laneham	4.1	0	2	0
Thurlaston Brook	Huncote	4.2	0	1	0
Strine	Crudgington	1.1	1	7	1
Tern Waters	Upton Ternhill	1.1	0	2	0
Rhaiadr	B4396 Bridge, Llanrhaiadr	1.3	0	0	0

APPENDIX

Results of individual sample audits

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Nailsworth Stream
DATE	9.3.92	SITE	Avening
SORTER	2.4	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Scirtidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Elodes sp. (larva) 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Glynch Brook
DATE	28.5.92	SITE	Bury Court
SORTER	2.4	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Sphaeriidae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Sphaeriidae*

NET LOSSES

0

NET GAINS

0

NOTES:

2 Pisidium sp.

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Piddle Brook
DATE	26.5.92	SITE	d/s Flyford Flavell WRW
SORTER	2.3	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Leptoceridae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Athripsodes aterrimus

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Smite Brook
DATE	28.5.92	SITE	u/s Coombe Abbey WRW
SORTER	2.3	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	None

NET LOSSES

NET GAINS

NOTES:

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Lathkill
DATE	14.4.92	SITE	Alport
SORTER	4.1	SAMPLE CODE	NRA04 5108

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Rhyacophilidae*	2 Tipulidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	3 Rhyacophilidae*

NET LOSSES

NET GAINS

NOTES:

2 Antocha vitripennis
3 Rhyacophila munda

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Cole
DATE	8.4.92	SITE	Lowbrook Bridge
SORTER	3.5	SAMPLE CODE	NRA04 8502

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Polycentropodidae 2 Psychomyiidae

NET LOSSES

0

NET GAINS

2

NOTES:

1 Plectrocnemia conspersa 1 only
2 Tinodes waeneri 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Kyre Brook
DATE	6.5.92	SITE	Tenbury
SORTER	1.3	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	1 Chironomidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Ephemeridae 3 Rhyacophilidae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Orthocladiinae + Tanytarsini in vial and sample, Tanypodinae + Chironomini in sample
 2 Ephemera danica 1 only
 3 Rhyacophila dorsalis

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Polser Brook
DATE	15.4.92	SITE	Radcliffe on Trent
SORTER	4.3	SAMPLE CODE	NRA04 4042

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	1 Elmidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Valvatidae 3 Leptoceridae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Elmis aenea (larva)
2 Valvata piscinalis 1 only
3 Athripsodes aterrimus 1 only

Posterior end of Hydroptila sp. found in sample

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Wye
DATE	14.4.92	SITE	Ashford
SORTER	4.1	SAMPLE CODE	NRA04 5104

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Sphaeriidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Pisidium sp.

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Rothley Brook
DATE	13.4.92	SITE	Newton Unthank
SORTER	4.2	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Erpobdellidae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Planariidae 3 Erpobdellidae* 4 Limnephilidae 5 Leptoceridae

NET LOSSES

0

NET GAINS

3

NOTES:

2 Polycelis nigra/tenuis 1 only
 3 Trocheta subviridis
 4 Limnephilus sp. 1 only
 5 Mystacides azurea 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Sibson Brook
DATE	5.3.92	SITE	Sibson
SORTER	3.1	SAMPLE CODE	NRA04 8172

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Leptophlebiidae 2 Dytiscidae 3 Psychomyiidae 4 Hydroptilidae 5 Limnephilidae

NET LOSSES

NET GAINS

NOTES:

- 1 Habrophlebia fusca 1 only
- 2 Potamonectes depressus (adult) 1 only
- 3 Tinodes waeneri
- 4 Hydroptila sp.
- 5 Anabolia nervosa 1 only

Note on data sheet that Unionidae returned to river. Not found by IFE in sample.

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Corve
DATE	6.5.92	SITE	Beambridge
SORTER	1.3	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Piscicolidae	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Planorbidae 3 Ephemerellidae 4 Leptoceridae

NET LOSSES

NET GAINS

NOTES:

2 Armiger crista
3 Ephemerella ignita
4 Athripsodes bilineatus, Ceraclea sp. (pupa)

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Henmore Brook
DATE	1.4.92	SITE	u/s Ashbourne
SORTER	3.1	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Lymnaeidae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Lymnaeidae* 3 Gammaridae

NET LOSSES

0

NET GAINS

1

NOTES:

1,2 Succinea sp. in vial, Lymnaea peregra in sample
3 Gammarus pulex

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Saltersford Brook
DATE	16.3.92	SITE	Oakthorpe
SORTER	3.5	SAMPLE CODE	NRA04 8031

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Asellidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Asellus aquaticus 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION RIVER DATE SITE SORTER SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL

B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Valvatidae

NET LOSSES

NET GAINS

NOTES:

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Severn
DATE	6.5.92	SITE	Montford Bridge
SORTER	1.1	SAMPLE CODE	NRA04 1010

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Leptoceridae 2 Lepidostomatidae	3 Hydrobiidae 4 Lymnaeidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	None

NET LOSSES

2

NET GAINS

2

NOTES:

3 Potamopyrgus jenkinsi
4 Lymnaea peregra

Macronychus quadrituberculatus (larvae) found in sample.

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Ragdale (Hoby) Brook
DATE	1.4.92	SITE	u/s R.Wreake, Hoby
SORTER	4.2	SAMPLE CODE	NRA04 6117

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Dytiscidae	2 Hydrophilidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	None

NET LOSSES

1

NET GAINS

1

NOTES:

2 Hydrobius fuscipes (adult) 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Collingham Brook
DATE	29.4.92	SITE	Collingham
SORTER	4.2	SAMPLE CODE	NRA04 6129

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Corixidae 2 Tipulidae

NET LOSSES

0

NET GAINS

2

NOTES:

1 Sigara lateralis 1 only
2 Limnophila (Eloeophila) sp.

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Torne
DATE	7.4.92	SITE	Hirst Priory
SORTER	4.1	SAMPLE CODE	NRA04 5805

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Dendrocoelidae	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Planorbidae

NET LOSSES

1

NET GAINS

1

NOTES:

2 Anisus vortex, Armiger crista

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Teme
DATE	23.4.92	SITE	Burrington
SORTER	1.1	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Hydrobiidae 2 Glossiphoniidae 3 Ephemerellidae 4 Leuctridae

NET LOSSES

NET GAINS

NOTES:

- 1 Potamopyrgus jenkinsi 1 only
- 2 Glossiphonia complanata 1 only
- 3 Ephemerella ignita 1 only
- 4 Leuctra sp. 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Torne
DATE	5.8.92	SITE	Tunnel Pits Farm
SORTER	4.3	SAMPLE CODE	NRA04 5804

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	1 Lymnaeidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Haliplidae

NET LOSSES

0

NET GAINS

2

NOTES:

1 Lymnaea palustris
2 Halipus sp. (larva)

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Ryton
DATE	16.7.92	SITE	Harrycrofts
SORTER	4.1	SAMPLE CODE	NRA04 5722

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Glossiphoniidae 2 Elmidae 3 Limnephilidae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Helobdella stagnalis 1 only
2 Elmis aenea (adult) 1 only
3 Limnephilus lunatus 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Onny
DATE	12.8.92	SITE	Newington Footbridge
SORTER	1.1	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Hydrophilidae 2 Psychomyiidae 3 Hydroptilidae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Indet Hydrophilid larvae
2 Tinodes waeneri 1 only
3 Ithytrichia sp. (pupa) 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Rea Brook
DATE	7.8.92	SITE	Malehurst
SORTER	1.1	SAMPLE CODE	NRA04 1054

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Gammaridae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Planorbidae 3 Gammaridae*

NET LOSSES

0

NET GAINS

1

NOTES:

2 Gyraulus albus
3 Gammarus pulex

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Press Brook
DATE	20.7.92	SITE	u/s Clay Cross WRW
SORTER	4.3	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	None

NET LOSSES

0

NET GAINS

0

NOTES:

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Foston Brook
DATE	22.6.92	SITE	Scropton
SORTER	3.5	SAMPLE CODE	NRA04 7951

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Planariidae 2 Hydrometridae 3 Sialidae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Polycelis nigra/tenuis 1 only
 2 Hydrometra gracilentata/stagnorum (nymph) 1 only
 3 Sialis sp. 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Anker
DATE	29.7.92	SITE	Tamworth
SORTER	3.7	SAMPLE CODE	NRA04 8210

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Glossiphoniidae*	2 Psychomyiidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	3 Dendrocoelidae 4 Glossiphoniidae*

NET LOSSES

0

NET GAINS

2

NOTES:

2 Taenodes waeneri
3 Dendrocoelum lacteum 1 only
4 Glossiphonia complanata, Theromyzon tessulatum

Note on label that "Viviparus sp. not in vial". Large V.viviparus found by IFE in sample.

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Dove
DATE	24.6.92	SITE	Sprink
SORTER	3.7	SAMPLE CODE	NRA04 7802

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Caenidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Caenis rivulorum

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Frome
DATE	30.6.92	SITE	Edgeworth Mill
SORTER	2.4	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Valvatidae 2 Sphaeriidae 3 Dytiscidae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Valvata piscinalis
 2 Pisidium sp. 1 only
 3 Oreodytes sanmarkii (larva) 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Itchen
DATE	1.6.92	SITE	u/s Long Itchington WRW
SORTER	2.4	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Tipulidae	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Dytiscidae 3 Simuliidae

NET LOSSES

1

NET GAINS

2

NOTES:

2 Potamonectes sp. (larva) 1 only
3 Simulium angustitarse group, S.aureum group (pupae)

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Tern
DATE	21.8.92	SITE	Betton
SORTER	1.1	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	1 Baetidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Hydroptilidae 3 Leptoceridae

NET LOSSES

0

NET GAINS

3

NOTES:

1 Baetis rhodani
2 Hydroptila sp. 1 only
3 Athripsodes bilineatus 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Dove
DATE	15.6.92	SITE	Dovedale
SORTER	3.7	SAMPLE CODE	NRA04 7804

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Planariidae 2 Philopotamidae

NET LOSSES

0

NET GAINS

2

NOTES:

1 Polycelis felina 1 only
2 Wormaldia sp

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Oldberrow Brook
DATE	16.6.92	SITE	B4480 Bridge
SORTER	2.4	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Rhyacophilidae	2 Psychomyiidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	None

NET LOSSES

1

NET GAINS

1

NOTES:

2 Tinodes waeneri

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Scaford Brook
DATE	4.8.92	SITE	u/s R.Wreake
SORTER	4.2	SAMPLE CODE	NRA04 4319

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Caenidae 2 Hydroptilidae

NET LOSSES

0

NET GAINS

2

NOTES:

1 Caenis luctuosa/macrura 1 only
2 Hydroptila sp. 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Quinny Brook
DATE	12.8.92	SITE	u/s Church Stretton WRW
SORTER	1.1	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Hydrophilidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Hydraena gracilis (adult) 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Plants Brook Section 1
DATE	13.8.92	SITE	Pype Hayes
SORTER	3.1	SAMPLE CODE	NRA04 8818

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Simuliidae

NET LOSSES

NET GAINS

NOTES:

1 Simulium aureum group 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Meer Brook
DATE	29.7.92	SITE	Frith Bottom Farm
SORTER	3.1	SAMPLE CODE	NRA04 7631

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	None

NET LOSSES

0

NET GAINS

0

NOTES:

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1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Leek Brook
DATE	15.7.92	SITE	Leekbrook
SORTER	3.1	SAMPLE CODE	NRA04 7681

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Erpobdellidae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Erpobdellidae*

NET LOSSES

0

NET GAINS

0

NOTES:

2 Erpobdella octoculata

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Derwent (Middle)
DATE	13.8.92	SITE	Cromford Station
SORTER	4.1	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	1 Tipulidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Leptophlebiidae 3 Caenidae 4 Goeridae 5 Lepidostomatidae

NET LOSSES

0

NET GAINS

5

NOTES:

- 1 Antocha vitripennis
- 2 Paraleptophlebia submarginata 1 only
- 3 Caenis rivulorum 1 only
- 4 Goera pilosa 1 only
- 5 Lepidostoma hirtum

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Sher Brook
DATE	26.8.92	SITE	Shugborough
SORTER	3.7	SAMPLE CODE	NRA04 7311

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Lymnaeidae 2 Rhyacophilidae 3 Goeridae 4 Sericostomatidae

NET LOSSES

0

NET GAINS

4

NOTES:

- 1 Lymnaea peregra 1 only
- 2 Agapetus sp., Rhyacophila dorsalis (pupa)
- 3 Silo pallipes 1 only
- 4 Sericostoma personatum 1 only

Label in vial says "Heptageniidae not in vial". Incomplete specimens of Ecdyonurus sp. found by IFE in sample.

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Derwent (Middle)
DATE	8.1.93	SITE	Cromford Station
SORTER	4.3	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Ancyliidae 2 Glossiphoniidae 3 Leptophlebiidae 4 Ephemerellidae 5 Haliplidae 6 Gyrinidae 7 Polycentropodidae

NET LOSSES

0

NET GAINS

7

NOTES:

- 1 Ancylyus fluviatilis 1 only
- 2 Glossiphonia complanata, Helobdella stagnalis
- 3 Paraleptophlebia submarginata
- 4 Ephemerella ignita 1 only
- 5 Brychius elevatus (adult) 1 only
- 6 Orectochilus villosus (larvae)
- 7 Polycentropus flavomaculatus

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Redlake
DATE	14.12.92	SITE	Jay
SORTER	1.3	SAMPLE CODE	NRA04 1826

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Elmidae*	2 Taeniopterygidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	3 Planariidae 4 Ancylidae 5 Sphaeriidae 6 Asellidae 7 Ephemerellidae 8 Perlodidae 9 Elmidae*

NET LOSSES

NET GAINS

NOTES:

2 Brachyptera risi
3 Polycelis nigra/tenuis
4 Ancylus fluviatilis
5 Pisidium sp. 1 only
6 Asellus aquaticus 1 only
7 Ephemerella ignita 1 only
8 Isoperla grammica
9 Elmis aenea, Limnius volckmari, Oulimnius sp. (larvae)

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Daddle Brook
DATE	8.12.92	SITE	d/s Alveley WRW
SORTER	1.3	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Nemouridae 2 Tipulidae

NET LOSSES

0

NET GAINS

2

NOTES:

1 Nemoura cambrica/erratica 1 only
2 Limnophila (Eloeophila) sp. 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Gaddesby (Ouston) Brook
DATE	2.11.92	SITE	u/s Gaddesby (Marefield) Bk
SORTER	4.2	SAMPLE CODE	NRA04 4324

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Caenidae 2 Dytiscidae 3 Limnephilidae

NET LOSSES

0

NET GAINS

3

NOTES:

- 1 Caenis luctuosa/macrura 1 only
- 2 Platambus maculatus (larva) 1 only
- 3 Indet Limnephilid (juvenile) 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-trent	RIVER	Hilton Brook
DATE	30.9.92	SITE	Longford Mill
SORTER	3.1	SAMPLE CODE	NRA04 7991

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Limnephilidae	2 Lepidostomatidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	3 Valvatidae

NET LOSSES

1

NET GAINS

2

NOTES:

2 *Lepidostoma hirtum*
3 *Valvata piscinalis*

Assumed that *Astacidae* was returned to river.

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Ashop
DATE	4.11.92	SITE	u/s Ladybower Reservoir
SORTER	4.1	SAMPLE CODE	NRA04 5009

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	None

NET LOSSES

NET GAINS

NOTES:

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Trent
DATE	7.12.92	SITE	d/s Knypersley Reservoir
SORTER	3.1	SAMPLE CODE	NRA04 7201

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Ancyliidae 2 Erpobdellidae 3 Rhyacophilidae 4 Philopotamidae 5 Psychomyiidae 6 Tipulidae

NET LOSSES

0

NET GAINS

6

NOTES:

- 1 Ancylyus fluviatilis
- 2 Erpobdella octoculata 1 only
- 3 Rhyacophila dorsalis 1 only
- 4 Wormaldia sp. 1 only
- 5 Tinodes waeneri
- 6 Dicranota sp.

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Downs Bank Brook
DATE	23.11.92	SITE	Oulton
SORTER	3.1	SAMPLE CODE	NRA04 7271

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Gammaridae*	2 Chloroperlidae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	3 Gammaridae* 4 Polycentropodidae

NET LOSSES

0

NET GAINS

2

NOTES:

2 Chloroperla torrentium
3 Gammarus pulex
4 Plectrocnemia conspersa 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Whitsun Brook
DATE	11.12.92	SITE	Bishampton
SORTER	2.4	SAMPLE CODE	NRA04 3505

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Elmidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Elmis aenea (larva) 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Birches Dingle
DATE	21.12.92	SITE	d/s Parkend
SORTER	2.4	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	None

NET LOSSES

0

NET GAINS

0

NOTES:

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Swift
DATE	16.12.92	SITE	Walcote
SORTER	2.4	SAMPLE CODE	NRA04 3914

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Hydropsychidae

NET LOSSES

0

NET GAINS

1

NOTES:

1 Hydropsyche angustipennis 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Elmley Castle Brook
DATE	10.12.92	SITE	Crophorne
SORTER	2.4	SAMPLE CODE	NRA04 3517

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Sphaeriidae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Sphaeriidae*

NET LOSSES

0

NET GAINS

0

NOTES:

2 Pisidium sp.

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Dene
DATE	13.10.92	SITE	Fosse Way Road
SORTER	2.4	SAMPLE CODE	NRA04 3619

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Erpobdellidae 2 Taeniopterygidae 3 Psychomyiidae 4 Hydroptilidae 5 Chironomidae

NET LOSSES

NET GAINS

NOTES:

- 1 Erpobdella octoculata 1 only
- 2 Taeniopteryx nebulosa 1 only
- 3 Lype sp. 1 only
- 4 Hydroptila sp.
- 5 Orthocladiinae

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Smite Brook
DATE	14.12.92	SITE	B4029 Bridge
SORTER	2.4	SAMPLE CODE	NRA04 3818

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Caenidae 2 Leptoceridae

NET LOSSES

NET GAINS

NOTES:

1 Caenis luctuosa/macrura 1 only
2 Athripsodes aterrimus, Mystacides azurea

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION RIVER DATE SITE SORTER SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL

B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	None

NET LOSSES

NET GAINS

NOTES:

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION Severn-Trent

RIVER Afon Gam

DATE 11.12.92

SITE Fridd Fawr Fisheries

SORTER 1.6

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Hydroptilidae	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	2 Ancylidae 3 Sphaeriidae 4 Baetidae 5 Leptophlebiidae

NET LOSSES

1

NET GAINS

4

NOTES:

- 1 Empty case in vial
- 2 Ancylus fluviatilis 1 only
- 3 Pisidium sp. 1 only
- 4 Baetis rhodani
- 5 Paraleptophlebia submarginata 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Banwy
DATE	11.12.92	SITE	Llangadfan
SORTER	1.6	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Hydrophilidae 2 Limnephilidae*	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	3 Limnephilidae* 4 Simuliidae

NET LOSSES

1

NET GAINS

1

NOTES:

3 Potamophylax sp.
4 Simulium cryophilum group

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	North Beck
DATE	29.9.92	SITE	Laneham
SORTER	4.1	SAMPLE CODE	NRA04 5923

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Valvatidae 2 Hydrophilidae

NET LOSSES

NET GAINS

NOTES:

<p>1 Valvata cristata 2 Indet Hydrophilid (larva) 1 only</p>
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1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION RIVER DATE SITE SORTER SAMPLE CODE AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Leptoceridae

NET LOSSES NET GAINS

NOTES:

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Strine
DATE	14.12.92	SITE	Crudgington
SORTER	1.1	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	1 Dendrocoelidae 2 Dytiscidae*	3 Hydrometridae

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	4 Valvatidae 5 Physidae 6 Dytiscidae* 7 Elmidae 8 Brachycentridae 9 Chironomidae 10 Simuliidae

NET LOSSES

1

NET GAINS

7

NOTES:

3 Hydrometra stagnorum
4 Valvata piscinalis 1 only
5 Physa fontinalis 1 only
6 Potamonectes depressus (adult) 1 only
7 Elmis aenea, Oulimnius sp. (larvae)
8 Brachycentrus subnubilus
9 Orthocladinae, Chironomini
10 Simulium ornatum group 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION	Severn-Trent	RIVER	Tern Waters
DATE	9.12.92	SITE	Upton Ternhill
SORTER	1.1	SAMPLE CODE	

AQC OF BMWP FAMILIES A. IN VIAL

+

B. IN SAMPLE

+

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	1 Glossiphoniidae 2 Hydroptilidae

NET LOSSES

0

NET GAINS

2

NOTES:

1 Glossiphonia complanata 1 only
2 Hydroptila sp. (pupa) 1 only

1992 RIVER QUALITY SURVEY AQC - BIOLOGICAL SAMPLES

REGION

RIVER

DATE

SITE

SORTER

SAMPLE CODE

AQC OF BMWP FAMILIES A. IN VIAL B. IN SAMPLE

A	VIAL	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES FOUND BY IFE
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in VIAL by IFE	None	None

B	SAMPLE	BMWP FAMILIES NOT FOUND BY IFE	ADDITIONAL FAMILIES
	Differences between: i) BMWP families listed on sample data sheet and ii) BMWP families found in SAMPLE by IFE	(This box only completed when no vial is supplied with sample)	None

NET LOSSES

NET GAINS

NOTES:

3